# Soft Fluoropolymer Tubing Inch Size TID Series



### Flexibility: Improved by approx. 20%

SMC comparison (Fluoropolymer tubing, TL/TIL series)

## Compatible with the Food Sanitation Law

- · Compatible with the test conforming to the Food Sanitation Law based on the 370th notice given by the Ministry of Health and Welfare in 1959
- · Complies with FDA (Food and Drug Administration) §177.1550 dissolution test.

## Operating Temperature: Max. 260°C

It varies depending on the operating pressure. Refer to the graph for the maximum operating pressure.

#### Flame Resistant (Equivalent to UL-94 Standard V-0)





Bend the tubing into the U-form at a temperature of 20°C. Fix one end and close loop gradually. Measure 2R when the deformed ratio of the tubing diameter at bending reaches 5%.

## Maximum Operating Pressure



## Model/Specifications

Size		Inch size				
Model		TID01	TID05	TID07	TID11	TID13
Tubing O.D.	inch	1/8"	3/16"	1/4"	3/8"	1/2"
	mm	3.18	4.75	6.35	9.53	12.7
Tubing I.D.	inch	0.086"	0.124" (1/8")	0.156" (5/32")	0.25" (1/4")	0.374" (3/8")
	mm	2.18	3.15	3.95	6.33	9.5
Roll	8 m (25 ft)		•		•	•
	16 m (50 ft)		•	•	•	•
Color		Translucent (material color)				
Applicable fluid		Refer to the applicable fluid in page 511.				
Fluid Note 1)		Air, Water Note 1), Inert gas				
Applicable fittings Note 2)		Stainless Steel 316 insert fittings KFG2 series Fluoropolymer fitting LQ series				
Max. operating pressure (MPa)	20°C or less	1.4	1.4	1.6	1.4	0.9
	100°C	0.7	0.7	0.9	0.7	0.5
	200°C	0.35	0.35	0.45	0.35	0.25
	260°C	0.2	0.2	0.23	0.2	0.15
Min. bending radius (mm) Note 3)	Recommended radius	15	20	25	40	75
	Tube close bend radius	9	10	15	23	42
Operating temperature (fixed usage)		Air, Inert gas: -65 to 260°C Water: 0 to 100°C (No freezing)				
Material		Modified PTFE (Polytetrafluoroethylene resin)				

RoHS

Note 1) When using a liquid fluid, the surge pressure must be under the maximum operating pressure. If the surge pressure exceeds the maximum operating pressure, it will result in damage to fittings and tubing. Furthermore, abnormal temperature rise caused by adiabatic compression may result in the tubing bursting.

#### Note 2) Do not use this product in a matter in which the tubing is not fixed.

Observe the lesser value of the maximum operating pressure between the tubing and fittings. A material change over a long duration or due to high-temperature may cause leakage. Perform periodic maintenance and replace with a new product immediately when abnormalities are detected

(Refer to "Maintenance" of the tubing precautions on page 514.) For other precautions, refer to "Fittings & Tubing Precautions" on pages 13 to 17. When using the fluoropolymer fittings, refer to the precautions on pages 445 and 446.

Note 3) The minimum bending radius is the representative value measured as shown in the left figure. • Use a tube above the recommended minimum bending radius.

- . The tubing may be bent if used under the recommended minimum bending radius.
- Therefore, refer to the tube close bend radius and make sure that the tubing is not bent or flattened. Please note that the tube close bend radius is not warranted because of the value when 2R is measured by the method in the left figure if the tubing is bent or flattened, etc.

## How to Order

